



## **Post-Traumatic Stress Disorder**

### ***January , 2003***

1. Calhoun PS, Bosworth HB, Grambow SC, Dudley TK, Beckham JC.

#### **Medical service utilization by veterans seeking help for posttraumatic stress disorder.**

**Am J Psychiatry 2002 Dec;159(12):2081-6**

OBJECTIVE: Posttraumatic stress disorder (PTSD) has been associated with higher rates of health complaints and medical conditions diagnosed by physicians, yet research examining the relationship between PTSD and health care utilization has been limited. This study compared the health service use of veterans with PTSD to that of help-seeking veterans without PTSD. The relationship between severity of PTSD and service utilization was also examined. METHOD: Data were collected from 996 veterans seeking an evaluation at a Veterans Affairs (VA) Medical Center specialty PTSD clinic in the southeastern United States between March 1992 and September 1998. Data included sociodemographic characteristics, severity of PTSD, and disability status. The outcome variable, VA health service utilization, was prospectively assessed 1 year from the date of the initial PTSD assessment. RESULTS: Although the use of VA mental health services by patients with PTSD was substantial (a median of seven clinic stops), these patients used more services in general physical health clinics that provided predominantly nonmental health services (a median of 18 clinic stops). Negative binomial regression models revealed that younger veterans with PTSD had greater health care utilization than those without PTSD who also sought services. Greater severity of PTSD was related to higher rates of mental and physical health service use among veterans without a service-connected disability. CONCLUSIONS: PTSD is associated with substantial health service use. The results highlight the importance of increased collaboration between primary care and mental health specialists, given that patients with PTSD are more likely to receive treatment in nonmental health clinics.

2. Vythilingam M, Heim C, Newport J, Miller AH, Anderson E, Bronen R, Brummer M, Staib L, Vermetten E, Charney DS, Nemeroff CB, Bremner JD.

#### **Childhood trauma associated with smaller hippocampal volume in women with major depression.**

**Am J Psychiatry 2002 Dec;159(12):2072-80**

OBJECTIVE: Smaller hippocampal volume has been reported only in some but not all studies of unipolar major depressive disorder. Severe stress early in life has also been associated with smaller hippocampal volume and with persistent changes



in the hypothalamic-pituitary-adrenal axis. However, prior hippocampal morphometric studies in depressed patients have neither reported nor controlled for a history of early childhood trauma. In this study, the volumes of the hippocampus and of control brain regions were measured in depressed women with and without childhood abuse and in healthy nonabused comparison subjects. METHOD: Study participants were 32 women with current unipolar major depressive disorder-21 with a history of prepubertal physical and/or sexual abuse and 11 without a history of prepubertal abuse-and 14 healthy nonabused female volunteers. The volumes of the whole hippocampus, temporal lobe, and whole brain were measured on coronal MRI scans by a single rater who was blind to the subjects' diagnoses. RESULTS: The depressed subjects with childhood abuse had an 18% smaller mean left hippocampal volume than the nonabused depressed subjects and a 15% smaller mean left hippocampal volume than the healthy subjects. Right hippocampal volume was similar across the three groups. The right and left hippocampal volumes in the depressed women without abuse were similar to those in the healthy subjects. CONCLUSIONS: A smaller hippocampal volume in adult women with major depressive disorder was observed exclusively in those who had a history of severe and prolonged physical and/or sexual abuse in childhood. An unreported history of childhood abuse in depressed subjects could in part explain the inconsistencies in hippocampal volume findings in prior studies in major depressive disorder.

3. Silver M, Gound M.

**Posttraumatic stress disorder. Recognition and recovery.**

Adv Nurse Pract 2002 Nov;10(11):65-8, 80

Publication Types: Review; Review, Tutorial

4. O'Neill S.

**War is unhealthy.**

Am J Nurs 2002 Nov;102(11):11

5. Fazel M, Stein A.

**The mental health of refugee children.**

Arch Dis Child 2002 Nov;87(5):366-70

The UK is facing a major increase in the number of people seeking asylum each year, of whom approximately a quarter are children. The stressors to which refugees are exposed are described in three stages: (1) while in their country of origin; (2) during their flight to safety; and (3) when having to settle in a country of refuge. The evidence concerning the impact of displacement on children's mental health is reviewed and a framework for conceptualising the risk factors is proposed. The available literature shows consistently increased levels of psychological morbidity among refugee children, especially post-traumatic stress disorder, depression, and anxiety disorders. The principles underlying the delivery of mental health care for these children are also considered. It is argued that much primary prevention can be undertaken in the school context. Some key aspects of British immigration law are examined and the tension between the law and the best interests of the child principle is discussed. There is particular concern for the plight of unaccompanied children. Attention to the mental health needs of this vulnerable group is urgently required.



6. Donker GA, Yzermans CJ, Spreeuwenberg P, van der Zee J.

**Symptom attribution after a plane crash: comparison between self-reported symptoms and GP records.**

Br J Gen Pract 2002 Nov;52(484):917-22

**BACKGROUND:** On 4 October 1992, an El Al Boeing 747-F cargo aeroplane crashed on two apartment buildings in Amsterdam. Thirty-nine residents on the ground and the four crew members of the plane died. In the years after, a gradually increasing number of people attributed physical signs and symptoms to their presence at the disaster scene. **AIM:** To investigate the consistency between patients' symptoms attributed to the crash and GPs' diagnoses and perception of the association with the crash. **DESIGN OF STUDY:** Comparison between self-reported symptoms to a call centre and GPs' medical records on onset and type of symptoms, diagnoses, and GPs' perception of association with the disaster, assessed by questionnaire. **SETTING:** Consenting patients (n = 621) contacting the call centre and their GPs. **METHOD:** Patients were interviewed by the call centre staff and interview data were recorded on a database. Questionnaires were sent to the consenting patients' GPs, requesting their opinions on whether or not their patients' symptoms were attributable to the effects of disaster. Baseline differences and differences in reported symptoms between interviewed patients and their GP records were tested using the chi2 test. **RESULTS:** The 553 responders reported on average 4.3 symptoms to the call centre. The majority of these symptoms (74%) were reported to the GP. Of the ten most commonly reported symptoms, fatigue, skin complaints, feeling anxious or nervous, dyspnoea, and backache featured in 80% of symptoms reported to the GP. One out of four symptoms was either reported to the GP before the disaster took place, or six or more years after (1998/1999, during a period of much media attention). Depression (7%), post-traumatic stress disorder (PTSD) (5%) and eczema (5%) were most frequently diagnosed by GPs. They related 6% of all reported symptoms to the disaster. **CONCLUSIONS:** Most of the symptoms attributed to a disaster by patients have been reported to their GP, who related only a small proportion of these to the disaster.

7. Hull AM, Alexander DA, Klein S.

**Survivors of the Piper Alpha oil platform disaster: long-term follow-up study.**

Br J Psychiatry 2002 Nov;181:433-8

**BACKGROUND:** The long-term psychological effects of surviving a major disaster are poorly understood. We undertook a survey of survivors of the Piper Alpha oil platform disaster (1988). **AIMS:** To examine the role of factors relating to the trauma, the survivors and the survivors' circumstances. **METHOD:** Ten years after the disaster, 78% (46/59) of the survivors were located, of whom 72% (33/46) agreed to be interviewed. A further three individuals completed postal measures. **RESULTS:** The most stringent diagnostic criteria for post-traumatic stress disorder (PTSD) were met by 21% (7/33) of the survivors over 10 years after the disaster. Features such as physical injury, personal experience and survivor guilt were associated with significantly higher levels of post-traumatic symptoms. **CONCLUSIONS:** A narrow definition of factors affecting outcome will limit the potential for improving survivor well-being in the long-term after major disasters. Specific symptoms that are not included in the criteria for the diagnosis of PTSD, together with issues such as re-employment, need to be addressed.



8. Davidson JR.

**Surviving disaster: what comes after the trauma?**

Br J Psychiatry 2002 Nov;181:366-8

Publication Types: Editorial; Review; Review, Tutorial

9. Franklin CL, Young D, Zimmerman M.

**Psychiatric patients' vulnerability in the wake of the September 11th terrorist attacks.**

J Nerv Ment Dis 2002 Dec;190(12):833-8

The September 11, 2001 (9/11) terrorist attacks led to speculation about the vulnerability of psychiatric patients to psychological distress following such events. This study examined the impact of national terrorist attacks on psychiatric and medical outpatients living approximately 150 to 200 miles from the attack sites (N = 308). Two to 3 weeks following 9/11, patients were given questionnaires assessing background information, healthcare service utilization, and posttraumatic stress disorder (PTSD) symptoms. Psychiatric patients (33%) were significantly more likely than medical patients (13%) to report distressing symptoms meeting criteria for PTSD (except for the duration criterion) despite no differences in learning about the attacks or personal involvement with the victims. Patients meeting PTSD criteria were more likely to schedule an appointment to speak with their physician about their reactions. Psychiatric patients not directly impacted by the 9/11 terrorist attacks are at increased risk for experiencing distressing symptoms following national terrorist attacks.

10. Livanou M, Basoglu M, Salcioglu E, Kalendar D.

**Traumatic stress responses in treatment-seeking earthquake survivors in Turkey.**

J Nerv Ment Dis 2002 Dec;190(12):816-23

This study examined the incidence of posttraumatic stress disorder (PTSD) and depression in 1,027 earthquake survivors who were consecutively referred to a community center at a mean of 14 months after the August 1999 earthquake in Turkey. Seventy-seven percent of referrals were women. The estimated rates of PTSD and major depression were 63% and 42%, respectively. More severe PTSD symptoms related to greater fear during the earthquake, female gender, lower education, loss of friends, shorter time since the earthquake, and material loss. More severe depression symptoms related to female gender, longer time since the earthquake, lower educational level, loss of a family member, and past psychiatric illness. In conclusion, long-term public mental health policies are needed for postearthquake psychological problems. These policies need to take into account the risk factors for traumatic stress and the gender differences in referral patterns. The differential stressor-response relationship may have important implications for treatment.

11. Wastell CA.

**Exposure to trauma: the long-term effects of suppressing emotional reactions.**

J Nerv Ment Dis 2002 Dec;190(12):839-45

A cross-sectional study of 437 ambulance officers in a large state of Australia examined the long-term effects of suppressing emotion reactions to exposure to trauma. Results indicate that the use of emotion-suppressing defenses (e.g., withdrawal or acting out) have a highly significant positive relationship with physical and psychological stress symptoms. Alexithymia scores were also



positively associated with stress symptoms. In addition, there was a positive association between years of ambulance service and stress symptoms. Implications of the findings are discussed for recovery from exposure to trauma of emergency services personnel and more generally to the experience of survivors of trauma.

12. Laor N, Wolmer L, Kora M, Yucel D, Spirman S, Yazgan Y.

**Posttraumatic, dissociative and grief symptoms in Turkish children exposed to the 1999 earthquakes.**

J Nerv Ment Dis 2002 Dec;190(12):824-32

Tel Aviv Community Mental Health Center and Sackler School of Medicine, Tel-Aviv University, 9 Hatzvi St., Tel-Aviv 67197, Israel.

Grief and dissociation after traumatic exposures are among the most important predictors of posttraumatic stress disorder (PTSD). This article introduces the Traumatic Dissociation and Grief Scale (TDGS), a 23-item measure easily administered. The TDGS, the Child PTSD-Reaction Index (CPTSD-RI), and a questionnaire concerning risk factors related to the event (losses, injury, and witnessing death and injuries) were administered to school-aged children who had been directly exposed to the 1999 earthquakes in Turkey and to a nonexposed control group. Factor analysis of the TDGS yielded four factors: perceptual distortions, body-self distortions, irritability, and guilt and anhedonia. A moderate positive correlation was noted between the TDGS and the CPTSD-RI. Different sets of risk factors were associated with the different scale factors. The results suggest that the assessment of psychopathology in children following a disaster requires the complementary evaluation of symptoms of posttrauma, dissociation, and grief.

13. Asmundson GJ, Stein MB, McCreary DR.

**Posttraumatic stress disorder symptoms influence health status of deployed peacekeepers and nondeployed military personnel.**

J Nerv Ment Dis 2002 Dec;190(12):807-15

Posttraumatic stress disorder (PTSD) is associated with depression and alcohol abuse. PTSD symptoms also contribute to poor health among military veterans. The aim of the present study was to test models pertaining to the direct and indirect influences of PTSD symptoms on the health status of deployed and sociodemographically comparable nondeployed military personnel. Participants were 1,187 deployed male peacekeepers and 669 nondeployed male military personnel who completed a battery of questionnaires, including measures of PTSD symptoms, depression, alcohol use, and general health status. Structural equation modeling was used to test predictions regarding the direct and indirect influences of PTSD symptoms on health status. Results indicate that PTSD symptoms have a direct influence on health, regardless of deployment status. PTSD symptoms also indirectly promote poorer health through influence on depression, but not alcohol use, in deployed and nondeployed peacekeepers. Increased alcohol use did not contribute to poorer health beyond the contribution of PTSD symptoms alone. Future research directions are discussed.

14. Malta LS, Blanchard EB, Taylor AE, Hickling EJ, Freidenberg BM

**Personality disorders and posttraumatic stress disorder in motor vehicle accident survivors.**

J Nerv Ment Dis 2002 Nov;190(11):767-74

This study examined the impact of a co-occurring personality disorder on the development and remission of posttraumatic stress disorder (PTSD) in 158 motor



vehicle accident (MVA) survivors followed prospectively for 1 year. Participants were assessed 1 to 4 months after trauma and at 6-month and 1-year follow-up evaluations during 1991 through 1993. These archival data were analyzed in the present study. The prevalence of at least one personality disorder was 13.3%, with the majority (52.4%) presenting with obsessive-compulsive personality disorder. Persons with a personality disorder were significantly more likely to be diagnosed with PTSD at 1-year follow-up evaluation. For persons diagnosed with PTSD at the initial assessment, those with a personality disorder were significantly less likely to remit by 1 year. The presence of a preexisting personality disorder may increase the risk of chronic PTSD and impede remission.

15. Holbrook TL, Hoyt DB, Stein MB, Sieber WJ.

**Gender differences in long-term posttraumatic stress disorder outcomes after major trauma: women are at higher risk of adverse outcomes than men.**

J Trauma 2002 Nov;53(5):882-8

**BACKGROUND:** The importance of psychological morbidity after major trauma, such as posttraumatic stress disorder (PTSD), is continuing to gain attention in trauma outcomes research. The Trauma Recovery Project is a large prospective epidemiologic study designed to examine multiple outcomes after major trauma, including quality of life (QoL) and PTSD. Patient outcomes were assessed at discharge and at 6, 12, and 18 months after discharge. The specific objectives of the present report are to examine gender differences in prolonged PTSD (L-PTSD) and to assess the impact of PTSD by gender on QoL at the 6-, 12-, and 18-month follow-up time points in the Trauma Recovery Project population. **METHODS:** Between December 1, 1993, and September 1, 1996, 1,048 eligible trauma patients triaged to four participating trauma center hospitals in the San Diego Regionalized Trauma System were enrolled in the study. The enrollment criteria for the study included the following: age 18 years and older; admission Glasgow Coma Scale score of 12 or greater; and length of stay greater than 24 hours. QoL was measured after injury using the Quality of Well-being (QWB) scale, a sensitive index to the well end of the functioning continuum (range: 0 = death to 1.000 = optimum functioning). Early symptoms of acute stress reaction (SASR) at discharge were assessed using the Impact of Events Scale (score > 30 = SASR). PTSD at 6-, 12-, and 18-month follow-up was diagnosed using standardized Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition, criteria. PTSD (L-PTSD) was diagnosed if full or partial (F + P) or full (F) PTSD Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition, criteria were present at all follow-up time points. **RESULTS:** PTSD (L-PTSD) (F + P) was diagnosed in 35% (221 of 627) of patients at follow-up. PTSD (L-PTSD) (F) was present in 32% (153 of 627). Women were at significantly higher risk of PTSD (F + P) (odds ratio = 2.4,  $p = 0.001$ ) and PTSD (F) (odds ratio = 2.8,  $p = 0.001$ ) than men. The association of gender with PTSD was independent of mechanism and injury event-related factors such as perceived threat to life. In multivariate logistic regression, female gender, perceived threat to life, and SASR were strongly and independently associated with PTSD risk. Women were also at risk for worse QWB outcomes; beginning at discharge through the 18-month follow-up, women had significantly lower QWB scores at each follow-up time than men, regardless of prolonged PTSD status. **CONCLUSION:** These results provide important new evidence that high rates of PTSD persist in the long-term aftermath of major trauma. The association of gender with PTSD was independent of mechanism and injury event-related factors such as perceived threat to life. Within categories of specific mechanism of injury and injury event-related factors, women were at significantly higher risk of prolonged PTSD onset. Prolonged PTSD was associated



with significantly reduced quality of life in both men and women, with markedly worse QWB outcomes in women regardless of prolonged PTSD status.

16. Tochigi M, Umekage T, Otani T, Kato T, Iwanami A, Asukai N, Sasaki T, Kato N. **Serum cholesterol, uric acid and cholinesterase in victims of the Tokyo subway sarin poisoning: a relation with post-traumatic stress disorder.** Neurosci Res 2002 Nov;44(3):267-72

Cholesterol and uric acid, which might correlate with steroidogenesis and monoamine functions, may change under emotionally stressful conditions and in mental disturbances. Among anxiety disorders, an increase of serum cholesterol has been observed in panic disorder. However, the issue has not been adequately investigated in other anxiety disorders, including post-traumatic stress disorder (PTSD). The present study investigated serum cholesterols, uric acid and cholinesterase in victims of the Tokyo subway sarin poisoning, 1995, in a series of 5-year follow-ups. Cholinesterase was studied, in relevance with serum lipid changes and symptoms of PTSD, and also in light of a biological effect of sarin. Out of 34 victims, eight developed PTSD and two were currently diagnosed with PTSD using the Clinician-Administered PTSD Scale (CAPS). No significant relationship was observed between PTSD and serum cholesterols or uric acid. Several factors including co-occurrence of other mental disturbances with PTSD, in addition to the limited sample size, might have affected the result. In contrast, serum cholinesterase level was significantly reduced in the victims with the development of PTSD, compared with the matched controls ( $P < 0.02$ , t-test). This might partly reflect a long-term remnant effect of sarin intoxication, although an effect of the psychological experience could not be totally excluded.

17. Harvey AG, Bryant RA  
**Acute stress disorder: a synthesis and critique.** Psychol Bull 2002 Nov;128(6):886-902

The diagnosis of acute stress disorder (ASD) was introduced to describe initial trauma reactions that predict chronic posttraumatic stress disorder (PTSD). This review outlines and critiques the rationales underpinning the ASD diagnosis and highlights conceptual and empirical problems inherent in this diagnosis. The authors conclude that there is little justification for the ASD diagnosis in its present form. The evidence for and against the current emphasis on peritraumatic dissociation is discussed, and the range of biological and cognitive mechanisms that potentially mediate acute trauma response are reviewed. The available evidence indicates that alternative means of conceptualizing acute trauma reactions and identifying acutely traumatized people who are at risk of developing PTSD need to be considered.

Publication Types: Review; Review, Academic